



1/1 JAPIO - (C) JPO & Japio

PN - \*\*\*JP9206559\*\*\* A 970812

AP - JP1799196 960202

TI - CONTACT REDUCING METHOD OF NITROGEN OXIDES

PA - (000000) SEKIYU SANGYO KASSEIKA CENTER

- (323794) SAKAI CHEM IND CO LTD

PAC - JP

- JP

IN - NAKATSUJI TADAO; YASUKAWA RITSU; TABATA KEIICHI

AB - PROBLEM TO BE SOLVED: To obtain a contact reducing method of nitrogen oxides by using hydrocarbons as a reducing agent and to provide a contact reducing method of nitrogen oxides by which nitrogen oxides in exhaust gas can be stably and efficiently reduced by a contact method without using a large amt. of a reducing agent even in the presence of oxygen, sulfur oxides and water content. (19)(11)

- SOLUTION: In the contact reducing method of nitrogen oxides contained in exhaust gas by using hydrocarbons as a reducing agent in the presence of a catalyst, an oxidation catalyst for nitrogen oxides is brought into contact with exhaust gas in a first stage to oxidize nitrogen monoxide (NO) in the exhaust gas into nitrogen dioxide (NO<sub>2</sub>). Then in a second stage, hydrocarbons are added to the exhaust gas and the mixture is brought into contact with a reducing catalyst for nitrogen oxides selected from silver, silver oxide and silver aluminate to reduce nitrogen oxides into nitrogen.



1/PN,TI,BA/1

DIALOG(R)File 351:(c)1998 Derwent Info Ltd. All rts. reserv.

Reduction of nitrogen oxide(s) - where the waste gas is contacted with oxidising catalyst and after adding hydrocarbon to the waste gas, it is contacted with reducing catalyst selected from Silver@, Silver oxide and silver aluminate to reduce

Patent Family:

Patent No	Kind	Date	Applicat	No Kind	Date	Main IPC	Week
JP 9206559	A	19970812	JP 9617991	A	19960202	B01D-053/94	199742 B

Abstract (Basic): JP 9206559 A

In the reduction of NO<sub>x</sub> in waste gas in the presence of catalyst using hydrocarbon as the reducing agent, the waste gas is contacted with NO oxidizing catalyst to oxidise NO to NO<sub>2</sub> and after adding hydrocarbon to the waste gas, it is contacted with NO<sub>2</sub> reducing catalyst selected from Ag, Ag<sub>2</sub>O and silver aluminate to reduce NO<sub>2</sub> to N<sub>2</sub>.

ADVANTAGE - NO<sub>x</sub> in waste gas is stably and effectively reduced without using a large quantity of reducing agent even in the presence of O<sub>2</sub>, sulphur oxide(s) and water.

Dwg.0/0